Spring Thaw 2018
CALCIMA
California Construction and Industrial Materials Association
Ontario February 27 Sacramento March 13

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Plant Safety Innovations
CALCIMA Spring Thaw
When equipment is all ready to go, mechanic marks the equipment.
Best Practice

Grab the attention of your guests

A simple pie graph from MSHA grabs the attention of our guests. If you notice “Supervisors” and “Truck Drivers” are leading the fatalities by occupation.

Site specific stickers are bright and easily visible for guests to receive after getting site specific trained.

In the event of an EMERGENCY, report to Granite Construction personnel at the plant office or call:

<table>
<thead>
<tr>
<th>Position</th>
<th>Phone Number</th>
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</thead>
<tbody>
<tr>
<td>Plant Foreman/Supervisor</td>
<td>316-748-7079</td>
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<tr>
<td>Plant Superintendent</td>
<td>316-748-7079</td>
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<tr>
<td>Plant Manager</td>
<td>316-748-7079</td>
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<tr>
<td>Safety Manager</td>
<td>316-748-7079</td>
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<tr>
<td>Environmental Control</td>
<td>316-748-7079</td>
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Reports and all accidents, incidents, or injuries: ALSO report all oil, diesel, gas, or chemical spills to plant supervisor immediately.

The following are MANDATORY guidelines to be followed when on-site. These have been established for your protection. FAILURE TO COMPLETE MAY RESULT IN REMOVAL FROM THE SITE.

1. Personal Protective Equipment

   a. Do the guys wear hard hats, safety glasses with side shield, safety shoes, and safety head bands should be worn at all times when on the job.

   b. Personal protective equipment to be worn in designated areas.

2. Traffic Equipment

   a. All personal safety equipment should be the right one.

   b. If you encounter a vehicle with any of the following personal protective equipment below, proceed with caution. Signal your intentions with your lights on to ensure you are heard properly and safely when you are traveling.

   c. All vehicles leaving the site should be parked safely with a vehicle on the road.

   d. Drivers will pass on site vehicles while being seated. You will not be looked at when you do not pass your vehicle.

   e. You are now on the safety drill. You are now instructed to go forward.

   f. All personnel leaving, exiting, or entering the site should be requested to pass through the control area.

   g. All personnel are prohibited from sharing with a similar drill system.

   h. Use 1 end of contact when entering construction sites and vehicles.

   i. Contracts: Personal protective equipment must be in good working condition before leaving the site.

2. Hazard Recognition/Order

   a. Do not travel through machinery. Do not open doors only at designated control points. Do not mount or unmount controls.

   b. Never be alone or unattended.

   c. All reports of your job site must be directed to the plant supervision.

   d. Proper tooling must be given before any job is done.

   e. Always be in the control of the recipient, and if you see any report for the plant supervisor.

   f. Be aware of any client, first priority of work.

   g. In general, large drills or backhoes are allowed at GCCC property.

   h. Failure, fire, water, procedures.

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<td>Signature</td>
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Vending Machine Safety Station
Best Practice
Electrical

- High visibility for safety underfoot
- Extra flexibility in cold weather
- Male plug has neon light to indicate power in cord and outlet
- Continuous Ground Monitoring (CGM) feature indicate there is a continuity in the ground wire. If there is no green light there has been a loss of ground continuity.

Link:
Ergonomic mats also known as ant fatigue mats can help make the working environment much more comfortable and easier on the feet.

LINK:

Best Practice
Lab

Reduce how often you lift heavy material with this awesome table design.
Evaluate the dusty areas within the lab. This hood and venting system has been added to control the dust and reduce the exposure.
Custom Hearing Protection

- Ensuring a good fit
- Allow you to still hear the non-harmful sounds such as back up alarms and verbal communication
- Shows your employees you care

https://superiorsoundtechnology.com/Hearing_Protection.html
Best Practice
Dust Control

Magnesium Chloride:
- Minimize dust on haul roads and plant area
- Reduces the need for multiple water trucks
- Conserves water
- Reduces fugitive dust for better air quality and public appearance
Best Practice
Railing vs. Fall Pro

Guardrails installed on screens so they can work on top of screen without using fall protection. Eliminate the hazard!!
Best Practice
Belt/flashing cutter

Utility knives can be dangerous, especially when cutting belts or doing splices. Using a cutter like these can help reduce your exposure and make your job easier.

Dremel Multi Max MM45

Belt Splice Video:
https://www.youtube.com/watch?v=LJKtDAZHpXk&feature=youtube_gdata_player

Patch Cut Video:
https://www.youtube.com/watch?v=4XZRJYpR77w&feature=youtube_gdata_player
Best Practice
Work Smarter not Harder

Instead of using a hammer to hit over and over again, speed up the process and get the right tool for the job. These help make the job easier, faster, and safer.
Best practice
Emergency Response with Fire Dept.

- Property Layout and Addresses
- Hot Plant Hazards
- Rock Plant Hazards
- Emergency Response Plan
Best Practice
7 foot rule (.14107 (b))

Simple pipe hanging down by chain will help prevent any question at all about areas that may be a walkway under 7 foot.
Best Practice

- Cleans under hard to reach places
- Attaches to telehandler
- Bobcat scoops also
Belt Splice Made Easy

- Ensures a safe work platform
- Designed to be installed with a forklift
- The “scissor lift” design raises the belt with little effort with an impact gun
- Safer and easier
Where material is known to build up and water is known to sit, these cuts were made into the concrete slab to help drain. Works great!
Best Practice
Walkways

Where material is known to be "Mucky" and mud is an issue, re-use old catwalks and use them as safe walkways.
Best Practice
Secure your tanks

This tank storage design allows you to individually get a tank not exposing the rest of them.
Best Practice
Stairs and Platforms vs. Ladders

Stairs and working platforms are much safer than ladders. Go through your plant and see what changes can be made to reduce the hazards.

Magnet that is cleaned sometimes daily.

New Stairs and Platform Process

Old Ladder Process
Best Practice
Everyday Parking

In areas that there are constantly trucks and equipment parking, consider installing fixed speed bumps or simply a ditch.
Best Practice
MCC Magnets for LO/TO and Confined Spaces

- Easily notifies employee of different hazards such as confined spaces.
- Reminds employees to fill out pre entry checklist for confined spaces
- Ensures all mandatory energy sources are Locked Out and Tagged Out.
Best Practice
Unique Signage

Plant Entrance:
1) Your dog
2) Yourself
3) Your Friends
4) Your Kids
5) Work Safe For Them
Best Practice
Hot Oil Warning Sign

Signs were added to hot oil locations to grab your attention and remind employees how serious hot oil is.

ATTENTION:

Any person off loading oil at a Granite Utah Operations facility MUST wear the following Personal Protective Equipment:

- Face Shield
- Safety Glasses
- Hard Hat
- Long Sleeve Shirt or Nomex Arm Protectors
- Long Pants or Nomex Coveralls
- Gloves
- Work Boots

Anyone who fails to comply with these requirements will be escorted off the property immediately. You will not be allowed to off load your truck and your company will be responsible for any associated expenses.
Traffic Control
Best Practice
Pre Fabricated Gates

- Cheap
- Easy to install
- Quick to install
- Heavy Duty
- Variety of sizes

Link:
Best Practice

Crossovers

- Cheap
- Easy to assemble
- Durable
- Safe
- Toe kicks
- Compliant
- Deny access between transfer points
Best Practice
Screen Catwalks vs. Planks

- Sturdy
- Easy to Use
- Durable
- Better tool for the job
Questions?

Thank You!

Focus on the details!